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Fremdling, Rainer

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A New Benchmark for 1936 and a Note on Hoffmann's Tales**

Research Memorandum GD-94c

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Groningen Growth and Development Centre
January 2008

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*Rainer Fremdling*¹

University of Groningen

Abstract:

This paper focuses on agricultural performance in 1936 as part of a comprehensive project to (re)construct a new and reliable benchmark for revising German historical national accounts. The new estimates presented here confirm the poor agricultural performance of Germany compared with other developed economies. The new figures are even significantly lower than Hoffmann's estimates: In particular, this is shown for key variables like gross and net value added and labour productivity. The benchmark year of 1936 is considered to be representative of the inter-war years. Consequently, once again my statement is confirmed that one should keep away from Hoffmann's figures when discussing any aspect of economic failure of the Weimar Republic or economic recovery after Hitler came to power.

¹ This research was supported by grants from the Dutch Organisation for Scientific Research (NWO), Deutsches Institut für Wirtschaftsforschung (DIW) and Wissenschaftszentrum Berlin (WZB).

Introduction

This article deals with a component part of a research project (carried out together with Reiner Stäglin) to construct an input-output table for Germany in 1936. The unpublished records of the industrial census of 1936 are the most important source for this endeavour.² Unfortunately, that census did not collect data on services and agriculture. This paper offers new figures on agricultural employment, input, output and labour productivity for 1936, thus exactly for the time when the industrial census was conducted.

In the first part of the paper, I deal with employment figures for the 1930s. Here Hoffmann's tales on agricultural employment get special attention. In the second part, I present my figures on agricultural input and output. Hoffmann's figures are discussed rather briefly because his crude estimation procedure is not exactly comparable with my approach based on (partly archival) information of the Imperial Statistical Office (StRA) and the Institute of Business Cycle Research (IfK).

With these figures at hand, labour productivity in German agriculture can be calculated easily. Its numerical value is relevant when putting Germany's overall economic performance into an international comparative perspective: According to the hypothesis put forward by Broadberry, Germany's weak performance compared with Britain at that time was mainly due to the poor achievement of agriculture and its large share within the German economy (Broadberry, 2006). This is a remarkable contrast with industrial productivity which by and large was at par with British achievements (Broadberry/Fremdling, 1990; Fremdling/de Jong/Timmer, 2007).

German Labour Force Statistics in the 1930s

Before dealing specifically with the agricultural labour force some general remarks on the nature of official statistics is due. Concerning the German Empire, the most important comprehensive sources for the labour force are the periodic censuses on workplace (Gewerbe- or Betriebszählungen) and occupation (Berufszählungen). During the 1930s, these censuses were conducted by the Imperial Statistical Office (Statistisches Reichsamt **StRA**) for the years of 1933 (1935) and 1939. In 1933, the territory covered excluded the Saarland. After the inclusion of the Saarland into the German Empire, this census was also done for this region in 1935. In 1939, the German Empire and thus the census comprised also Austria and Sudetenland (Sudeten Country). Detailed results of these censuses were published in numerous volumes of the Statistics of the German Empire (Statistik des Deutschen Reichs **StR**).³ Summary accounts can be found in the Statistical Yearbooks and other periodical publications of StRA (Statistisches Jahrbuch für das Deutsche Reich **StJR**, Vierteljahrshefte zur Statistik des Deutschen Reichs **VJ** and Wirtschaft und Statistik **WS**). After the war, the allied forces initiated detailed statistical compilations based on original (partly unpublished) sources (Statistisches Handbuch von Deutschland, Statistical Handbook of Germany 1946 **StH1946** and Statistisches Handbuch von Deutschland 1928-1944, Statistical Handbook of Germany 1928-1944 **StH1949**).

² For interim results and related publications, check the titles by Fremdling; Fremdling/Stäglin and Fremdling/de Jong/Timmer, listed in the bibliography.

It is often maintained that the occupational census is not suitable for allocating the labour force to their proper workplace (Hoffmann, 1965 pp.180-182). E.g. it is argued that a carpenter working in the metal trade will be assigned to this industry by the workplace census whereas he is classified as working in wood-processing by the occupational census. According to Hoffmann, this deviation is even more pronounced when dealing with white-colour workers. Since he aimed at matching his time-series of economic activity with appropriate labour inputs he relied on the workplace censuses wherever possible. He referred to the occupational census only when he lacked information from his preferred source. In his assessment of both types of censuses, however, Hoffmann is grossly mistaken in the case of Germany. On page one in the introduction to the occupational census of 1933, the Imperial Statistical Office (StR 458) explicitly states that on the counting date⁴ of the census, the labour force was assigned to their place of work and the unemployed to their last former workplace.⁵ This allocation of the employed people holds true for the occupational censuses of 1925 and 1939 as well.⁶ The coverage of the occupational census is comprehensive and consistent, because it also contains the workers in agriculture and in public services. Furthermore, second jobs are dealt with separately, which mattered especially in agriculture. By this distinction between the two employment categories double counting of the first job was avoided. Thus for estimations and proxies of the needed labour force in 1936, this exercise can safely draw on the occupational census.⁷

The data, however, cannot be used by simple linear interpolation between the two census years of 1933 and 1939:

1. Whereas the territorial change between 1936 and 1939 can be solved basically by subtracting the labour force of Austria and Sudetenland from the figures of the entire German Empire, the inclusion of Saarland two years later (1935) proves more difficult on the one hand but also helpful on the other.
2. Changes of the labour force in total numbers and its allocation depended on trends and the course of the business cycle. Specific trends were due to population growth, the changing number of foreign workers, the relative rise and decline of economic sectors and industrial branches and the creation of a large military force and mass organisations of semi-military activities (SA, SS) or semi-enforced labour (*Arbeitsdienst*, *Pflichtjahr* for women).⁸

During the course of the business cycle and due to some of the described trends, unemployment decreased significantly. In both censuses, people living in Germany (*Wohnbevölkerung*) were the starting point, whereas foreign workers were included. The 1939-census, however, gives only figures

³ Concerning the 1939 census, the StRA did not publish all the planned volumes.

⁴ 16.6.1933; 25.6.1935 StR 470, II; 17.5.1939 StR 556, I.

⁵ See also StR 453 II, p. 19.

⁶ On this point and for a thorough assessment of the German occupational censuses see Hohls and Kaelble (1989, p. 63; see also *Bevölkerung und Wirtschaft*, 1972, p. 33; Fritz, 2001, pp. 18- 23).

⁷ For industry/crafts, the workplace censuses of the 1930s were used to extrapolate existing employment figures of the 1936 industrial census. Major reason: I applied the distribution of the labour force according to firm size, which is reported for the two workplace censuses (Fremdling, 2007b or c).

⁸ Semi-enforced labour started on 1.10.1935. In 1936/37, this workforce was planned to comprise 230,000 men. In 1936, the actual workforce included between 183,968 (February) and 206,648 (April) men and between 9,508 (October) and 12,186 (April) women. They were mainly employed for the improvement of soil

for the permanent population (*Ständige Bevölkerung*). Drafted soldiers and semi-enforced labourers were excluded. Professional soldiers were included in both censuses under public services, separately reported only for 1933. The semi-military personal was dealt with accordingly (1939).⁹

The unemployed showed up extensively in the 1933/35-census. In 1939, they did not matter anymore and thus the Imperial Statistical Office (StR 555, p. 23) did not report separate figures on these categories. As percentage of the total dependent labour force unemployment made up 26.3 in 1933, 8.3 in 1936 and 0.6 in 1939.¹⁰

Agricultural Labour Force

The data collected by the Imperial Statistical Office for the census years of 1933/35 and 1939 have been widely used. Representative of others, three relevant publications are quoted in Table 1. Literature has drawn heavily on these publications, the more so since they offer the possibility to avoid consulting the clumsy, difficult to read volumes of the StR instead.

Table 1 *Number of People Engaged in German Agriculture, 1933 and 1939 (1000)*

Year	Hoffmann	StBA	Hohls/Kaelble
1933	9,034	9,343	9,388
1939	10,855	8,946	8,985

Sources: Hoffmann (1965: 206); *Bevölkerung* (1972: 142); Hohls/Kaelble (1989: 149).

Surprisingly, the figures differ from each other. The data for 1933 need discussing in some detail: Hoffmann's figure matches exactly the one reported in StR (453 II, p. 30), referring to people **employed** (*Erwerbstätige*) in Germany without Saarland. Against his declared intention, Hoffmann used the occupational instead of the workplace census. The Federal Statistical Office of Germany (Statistisches Bundesamt **StBA**) duplicates **employed and unemployed** people (*Erwerbspersonen*) of the occupational census on the then delimited German territory, which means exclusive of Saarland (StR 453 II, p. 30). Hohls/Kaelble followed the intention of the StBA, including Saarland however (StR 470 II, p. 4). Referring to the year of 1939, the three publications mean to give figures for Germany without Austria and Sudetenland. Whereas StBA and Hohls/Kaelble report figures of about the same size (Hohls/Kaelble could not avoid including some smaller former Czech regions annexed by Bavaria and Saxony, though), Hoffmann's number is far too high. It is close to the 10,847,516 *Erwerbspersonen* reported by StRA (StR 556 I, p. 2) for the German Empire including Austria and

(*Landeskulturarbeiten*) and increasingly for the harvest (*Einsatz bei landwirtschaftlichen Erntenotständen*), see Reichsarbeitsdienst, WS 1938, pp. 126-130.

⁹ In the statistics compiled under the direction of the Allied Forces after the war, figures for both the *Wohnbevölkerung* and the *Ständige Bevölkerung* are given: 1939 altes Reichsgebiet (17.5.1939) *Wohnbevölkerung* 69,316,526 (Source: StH1949, p. 17); 1939 altes Reichsgebiet (17.5.1939) *Ständige Bevölkerung* 68,126,018 (Source: StH1949, p. 29).

Thus military etc. 69,316,526 – 68,126,018 = 1,190,508 people. According to the estimation by Schildt (2006, p. 133) in 1939 1.3 Mio. people were soldiers or semi-enforced workers (*Dienstpflichtige*).

Sudetenland. For the territory of 1937, these made up 8,984,933 people.¹¹ The planned volumes of the StR on the agricultural workplace census announced in StR (560, p. 11) were never published. In Wirtschaft und Statistik (WS 1941, pp. 210-217), however, preliminary results were published. These figures for the German Empire including Austria and Sudetenland comprised 10,914,927 people of the workplace and 10,840,700 *Erwerbspersonen* of the occupational census. According to this source 9,002,236 people were counted in the workplace census on the territory of 1937 (WS 1941, p. 2149). In the Statistical Yearbook (StJR 1941/42, p. 107), the following figures of the workplace census for permanently employed people above the age of 14 were published: 10,778,627 including and 9,084,329 excluding Austria and Sudetenland. Thus it becomes clear that Hoffmann just picked the wrong number for 1939.

Hoffmann (1965, pp. 190 f.) used his two benchmark figures in order to estimate data for the missing years between 1933 and 1939. Based on the wage bill and the average wage for employees, he obtained the number of this group. The bulk of people engaged in agriculture were of course the self-employed farmers and their helping relatives (*mithelfende Familienangehörige*), e.g. in 1933/35 (Germany including Saarland), they made up 72 percent of total labour force (StR 470 II, p. 4). Hoffmann maintains that he applied a mere linear interpolation between the two benchmarks in order to estimate this group. In any case for the period 1933 to 1939, he arrived at the following figures (Hoffmann 1965, p. 206)

Table 2 Labour Force in German Agriculture

Year	1933	1934	1935	1936	1937	1938	1939
(1000 people)	9,034	9,030	9,030	9,020	9,010	9,010	10,855

Source: Hoffmann (1965: 206)

These figures are rather odd: The data for the benchmark years of 1933 and 1939 are not comparable and in the time-series, the steep jump from 1938 to 1939 indicates that Hoffmann not even followed the estimation procedure he described (Hoffmann 1965, p. 190 f.).¹² Thus Hoffmann's data are not helpful to produce a reliable figure for 1936.

Under the following considerations a proxy for the agricultural labour force in 1936 is obtainable. The estimation is based on the occupational census of 1933/35. Besides the arguments mentioned above, this census is superior to the workplace census specifically in agriculture because it also covers small holdings up to 0.5 *Hektar* (StR 461 I, p. 8). After the census had also been conducted for Saarland in

¹⁰ These calculations are based on the reports of health insurance companies and job centres. For the underlying figures see StJR 1941/42, pp. 410, 426.

¹¹ The figures for Sudetenland and Austria are: Sudetenland 439,782 (StR 557.6, p. 2), Alpen- und Donaureichsgaue ohne Wien 1,394,626 (StR 557.28, p. 2) and Wien 28,175 (StR 557.27, p. 2). On the former German territory without Saarland 8 929.4 million *Erwerbspersonen* were counted (WS 1940, p. 538). There was no differentiation between employed and unemployed people.

¹² It makes no sense to try and reproduce Hoffmann's figures here according to his alleged procedure. In any case, the relevant data are to be found in Hoffmann 1965, p. 494; StJR 1941/42 p. 613; StR 470 II, p. 4 and 556 I p. 2.

1935, StRA published a special edition of the StR (470 II) adding up the numbers of 1933 and 1935. Thus StRA considered the results of 1933 as representative of 1935 as well. Furthermore, due to the declined unemployment, this category was not anymore presented in detail but just in the summarising table on the first pages of the volume (StR 470 II, Vorbemerkung). The rather low official share of unemployment - agriculture is notorious for hidden unemployment, though (WS 1940, p. 334) - made up 3.3 percent in 1933 and 1.8 percent just for Saarland in 1935 (StR 453 II, p. 30; 469 II, p. 26). It is reasonable to assume that this share decreased in 1936. It is decided here to take the total labour force, i.e. employed and unemployed¹³ people (*Erwerbspersonen*), of the 1933/35 census as a proxy for fully employed labour in 1936. One can even argue that this proxy is a lower bound estimate: StRA also collected figures on second jobs. 1,694,006 people out of the 2,332,172 employed (*Erwerbstätige mit Nebenberuf*) worked in agriculture as well (StR 470 II, p. 9). This involvement probably accounted for a substantial part of labour input, because mere allotment gardening and comparable activities did not fall under this category (StR 453 II, p. 27). Table 3 presents the relevant approximate data for 1936.¹⁴

Table 3 Labour Force in German Agriculture, 1936

Agriculture, horticulture and stockbreeding	9,219,558
Forestry and fisheries	168,581
Total labour force	9,388,139

Source: StR 470 II: 4, 10.

Intermediate Input, Wages and Sales of German Agriculture

In 1934, StRA published a detailed account on expenditure for intermediate inputs and investment of the German agricultural sector.¹⁵ The assessment was based on official and private statistics, the relevant literature and direct information from professional organisations and experts. Total expenditure was broken down into 14 categories, two of which contained information on new buildings and replacement of machines and equipment, thus investment. All the others dealt with current spending thus intermediate input and wages for dependent agricultural workers. The first table presented data for the business years from 1924/25 up to 1933/34 (*Betriebsaufwand*, p. 518). In addition to this, StRA took over estimations of aggregate sales produced by the Institut für Konjunkturforschung (IfK, *Wochenbericht*).¹⁶

StRA conceded that the estimation yielded no more than a rough magnitude (“ungefähre Größenordnung”). Data based on the same estimation procedure nevertheless became the standard for assessing agricultural input and output in Germany after this first publication. On a regular basis, they

¹³ These comprised 309,968 people (StR 470 II, p. 4).

¹⁴ The relevant figures for Saarland in 1935 are respectively: 45,354; 44, 695 and 659 (StR 469 II, p. 26). For 1939, the following figures concerning the two branches of agriculture are reported: Greater German Empire 10,616,276 and 231,240; Sudetenland 423,648 and 16,134; Austria without Vienna 1,365,439 and 29,187; Vienna 27,496 and 679 (StR 556 I, StR 557.6, 27, 28 p. 4).

¹⁵ *Der Betriebsaufwand der deutschen Landwirtschaft*, in WS, 1934, pp. 518-521.

¹⁶ Bauer/Dehen, 1938/39, pp. 413 f.

were published in the official statistical yearbooks¹⁷ and for explanation of the estimation procedure, StRA always referred to the article in WS (Betriebsaufwand). Hoffmann (1965, p. 315) relied on these data for calculating agricultural input whereas for output he pursued a different strategy (Hoffmann, 1965, pp. 265-334).

For the purpose here, the data of StRA were used as starting point (StJR 1941/42 p. 613). For the year of 1936, the average of the business years of 1935/36 and 1936/37 was calculated in order to obtain the magnitude of agricultural input, wages and output. For allocating the inputs towards those sectors, which delivered the goods and services, an unpublished compilation by StRA was applied (BA R3102 2705). This had been compiled for preparing the basic data for the intended, but never finished, input-output-table of StRA (Fremdling, 2003, 2005, pp. 156-157; Tooze, 2001, p. 226, pass.). Based on the published data on agricultural expenditure in 1933/34¹⁸, StRA had assigned values to different sectors of origin. For the endeavour here, the percentage distribution was used to allocate the figures for 1936 in the same manner (see Table 4).

Table 4 *Input, Production and Employment of German Agriculture, Forestry and Fishery, 1936*

	Input from (Million RM)	Agriculture	Forestry/Fishery	Total
1	Mining	38.9	4.8	43.7
2	Fuel industries	0.0	17.9	17.9
6	Iron and steel products	121.0	44.0	165.1
7	Machinery	234.5	17.9	252.4
9	Vehicles and aerospace	0.0	17.9	17.9
10	Electrical engineering	121.0	0.0	121.0
17	Manufactured wood products	121.0	6.0	127.0
18	Chemical industry	802.1	36.9	839.0
22	Printing and duplicating	0.0	3.6	3.6
24	Textiles	0.0	4.8	4.8
26	Edible oil and fats	178.7	6.0	184.7
28	Food, beverages and tobacco	178.6	6.0	184.6
29	Building and construction	230.0	0.0	230.0
30	Electricity, gas and water	183.5	0.0	183.5
1-30	Total industry	2,209.4	165.4	2,374.9
31	Agriculture	178.7	7.1	185.8
32	Forestry, fishery	0.0	35.7	35.7
33	Sectors not covered	1,340.4	90.5	1,430.8
1-33	Domestic intermediate inputs	3,728.5	298.7	4,027.2
34	Imports	139.1	0.0	139.1
1-34	Total intermediate inputs	3,867.5	298.7	4,166.2
Production (Million RM)				
35	Net production/ gross value added	8,113.5	602.3	8,715.8
36	Depreciation/ gross fixed capital consump.	471.0	35.4	506.4
37	Net value added	7,642.5	566.8	8,209.3
38	of which labour income	1,763.5	238.0	2,001.5
1-37	Gross production	11,981.0	901.0	12,882.0
Employment (1000)				
		9,219.558	168.581	9,388.139

¹⁷ See the last edition of StJR 1941/42, p. 623.

¹⁸ StJR 1935, with reference to the article (Betriebsaufwand) in WS, is given as source.

Sources and notes to table 4: The numbers 1 to 30 refer to the classification of the 1936 industrial census. The allocation of inputs needed sometimes arbitrary decisions, e.g. energy/fuel consumption was assigned either to 1, 2 or 30. Investment, thus gross fixed capital formation was not counted as intermediate consumption. Expenditure for small tools, maintenance and repair of fixed assets were treated as intermediate consumption. For estimation procedures and sources see text.

Bauer/Dehen (1938/39) used these figures published in StJR in order to estimate agricultural income, however, modifying some of the basic data slightly. They suggest, the item of 'new buildings and maintenance' to be totally counted as depreciation and that of 'machinery and equipment' to be assigned to depreciation by two third. I followed their suggestion, thus these figures were allocated to investment and depreciation accordingly. For agricultural dwellings, Bauer/Dehen estimated a value of 1.7 billion RM for hypothetical leasing and thus hypothetical agricultural income. In general, however, their modified figures were not taken into account here, as the focus is production and not income.

The wage bill for workers in agriculture, horticulture and stockbreeding comprised 1,763.5 million RM in 1936. It includes the employers' payment on social security. Total sales made up 9,008.5 million RM. Adding to this one third as production for own consumption gross output amounts to 11,981 million RM (IfK, *Wochenbericht* 9 no.2, p. 128; Bauer/Dehen, 1938/39, p. 414 with slightly different figures).

Table 5 Output of Selected Agricultural Products, 1936. Hoffmann and Imperial Statistical Office (StRA) Compared.

	Quantity	Wholesale Price RM	Corr. Factor	Hoffmann Output Value Mill. RM	StRA Sales Mill. RM	Index Hoff.=100
	I	II	III	IV	V	VI
Beef	754	158	0.52	619	892	144.0
Veal	193	203	0.52	204	320	157.1
Pork	2385	118	0.8	2251	2022	89.8
Mutton	39	166	0.52	34	50	148.5
Poultry	112	no price quotation			44	
Milk (Cow)	23018	14	8	2578	1930	74.9
Wool	10.1	520	10	53	37	69.5
Eggs	7390	0.0921	per piece1	681	339	49.8
Aggregate	Animal Production			8422	5656	67.2
	Vegetal Production			3608	3353	92.9
	Sum			12030	9009	74.9
	StRA including 1/3 for own consumption				11981	
I	1000 tonnes					
II	per 100 kilogramme or piece					
III	Factor to obtain a representative price for entire Germany					
IV	For some agricultural products e.g. poultry no value is given					
V	Average Sales Value of 1935/36 and 1936/37, based on estimates of the IfK/DIW					
VI	V divided by IV					

Sources: Hoffmann (1965: 303, 308, 319, 559); StJR (1941/42: 613)

Hoffmann (1965, p. 318) got a similar figure for gross production, namely 12,030 million RM. This is rather surprising because for specific items with comparable data like the production of beef, pork, mutton, milk, wool, honey and eggs, Hoffmann's figures deviate considerably in both directions from numbers given by StRA (see Table 5). His number for net production of 12,759 million RM, however, is much higher than mine of 8,113.5 million RM. In contrast to my approach, Hoffmann inflated gross production by 1,258 million RM for the rental value of agricultural dwellings and by an unusual increase of the live stock of 1,020 million RM (Hoffmann, 1965, p. 318). Furthermore he did not deduct all inputs listed in StJR (1941/42 p. 613) in order to get from gross to net production (gross value added). To some extent, these inputs were taken into account in his next step, i.e. deducting them from net production (gross value added) to arrive at (net) value added. In my calculation, these items are subtracted from gross production as input to obtain net production (gross value added).

Finally, the estimations of output, intermediate input and the wage bill for forestry and fishery are based on the unpublished source of StRA as well (BA R3102 2705). Output was assumed to comprise 10 percent of the other agricultural output without production for own consumption, thus amounting to 901 million RM in 1936. This ratio is confirmed by figures in the mentioned archival source (F 50, F 63) and furthermore for 1935 by the statistics on turn over taxes (Umsatzsteuerstatistik, vol. I, pp. 79, 85, 165, 180). For forestry and fishery, the different items for inputs and wages are assigned according to their relative values for 1933 (see Table 4).

Summarising Remarks and Labour Productivity

In Table 6, major results of my new benchmark estimate are summarised and juxtaposed against the widely used figures of Hoffmann et al. With the calculation of labour productivity the difference between Hoffmann's and my results is brought to the point. Although focussed on the single year of 1936 it can be concluded that Hoffmann's figures on the performance of German agriculture are significantly biased upwards probably for the entire interwar period. This is mainly due to his way to collect the numbers for gross output and to the procedure for measuring net output (GVA and NVA). Clearly his concept of national accounting deviates somewhat from the agreed *System of National Accounts* (1993). The specific upward bias of agricultural labour productivity in 1936 is also caused by Hoffmann's probably too low number of people working in agriculture. In general, Hoffmann's employment figures seem not to be reliable.

Table 6 Labour Force, Output and Productivity of German Agriculture 1936

	Hoffmann	Fremdling
Labour Force 1000	9,020	9,388
Gross Production m RM	12,030	12,882
Gross Value Added (GVA) m RM	12,759	8,716
Net Value Added (NVA) m RM	10,294	8,209
Labour Productivity (GVA) RM	1,415	928
Labour Productivity (NVA) RM	1,141	874

Sources and notes to table 6: Output figures are not strictly comparable, see text. Hoffmann: Hoffmann 1965, pp. 206, 318 f. Fremdling: Table 3.

My significantly lower figures on agricultural labour productivity confirm Broadberry's hypothesis developed when putting German economic performance into an international comparative perspective (Broadberry, 2006, p. 48). Thus my result fits into the picture of a German agricultural sector which employed an enormous work force at low productivity levels and which was hardly capable of feeding the rest of the German people during the 1930s sufficiently (Baten/Wagner, 2003; Steiner, 2005).

Finally, according to the bias in agricultural production, Hoffmann's figures on total German output, either measured as his net national product at market or factor prices (Hoffmann, 1965 pp. 826, 509) are probably 4 to 2 billion RM too high. This result underlines one of my principal objections against Hoffmann's tales: For the time before WW I, Hoffmann's aggregate output figures for Germany are considerably too low and for the interwar years significantly too high (see also Burhop/Wolff, 2005; Ritschl, 2002, 2004 and Ritschl/Spoerer 1997). Consequently, one should keep away from Hoffmann's figures when discussing any aspect of economic failure of the Weimar Republic or economic recovery after Hitler came to power (see also Fremdling, 2007b or c).

Glossary of terms and names

BA	Bundesarchiv Berlin-Lichterfelde, Federal Archive
DIW	Deutsches Institut für Wirtschaftsforschung
IfK	Institut für Konjunkturforschung, Institute of Business Cycle Research, later DIW
m	Million
NSDAP	Nationalsozialistische Deutsche Arbeiter-Partei
RM	Reichsmark
SA	Sturmabteilung, organisation of the NSDAP
SS	Schutz-Staffel, paramilitary organisation of the NSDAP
StBA	Statistisches Bundesamt, Statistical Office of the Federal Republic of Germany
StH1946	Statistisches Handbuch von Deutschland, Statistical Handbook of Germany 1946
StH1949	Statistisches Handbuch von Deutschland 1928-1944, Statistical Handbook of Germany 1928-1944
StJR	Statistisches Jahrbuch für das Deutsche Reich, Statistical Yearbook of the German Empire
StRA	Statistisches Reichsamt, Imperial Statistical Office
StR	Statistik des Deutschen Reichs, Statistics of the German Empire
VH	Vierteljahrshefte zur Statistik des Deutschen Reichs
WS	Wirtschaft und Statistik
VJK	Vierteljahrshefte zur Konjunkturforschung

Sources and literature

Official publications and reports

Where no date is given, publication was regular. Abridged subtitles and years refer to the contents of the statistics.

General Collections

Bevölkerung und Wirtschaft 1872-1972 (Statistisches Bundesamt, 1972)

Statistik des Deutschen Reichs (StR)

Berufszählung 1933, Die berufliche und soziale Gliederung der Bevölkerung des Deutschen Reichs, Vol. 453

Berufszählung 1933, Textliche Darstellung der Ergebnisse, Vol. 458

Landwirtschaftliche Betriebszählung 1933, Vol. 461

Gewerbliche Betriebszählung 1933, Vol. 462

Die berufliche und soziale Gliederung der Reichsbevölkerung 1933, 1935, Vol. 470.II

Umsatzsteuerstatistik 1935, Vol. 511.I, II, III

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